Championing Sustainable Practice of Reusable Face Masks: Framing TikTok Campaign of #Eco-Influencers

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CHAMPIONING SUSTAINABLE PRACTICE OF REUSABLE FACE MASKS: FRAMING TIKTOK CAMPAIGN OF #ECO-INFLUENCERS

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ABSTRACT

The pandemic not only brought the surge of the virus and fear but also led to a heavy environmental toll - unfolding the proposition of increasing face mask waste, resulting in an ongoing threat vis-à-vis the environment. The aim of the study is to encourage climate dialog to environmental activism through TikTok, dovetailing awareness as part of coalescing efforts on reusable face masks over single-use face masks. This study employed two-fold qualitative processes: Photovoice and Focus Group Discussion (FGD) in exploring the meanings of unsustainable practices of disposable facemasks. A different point of view was centered on the modification of attitudes and providing social awareness of the use of disposable face masks. Despite the strong stances against face mask, all participants agreed that facemasks will be in commonplace even the ebbing of the pandemic, but their wavelengths are firm to reinforce simple change mitigating the impact of plastic waste and that is to take advantage of imparting information via TikTok. The highlights and implications of the study revealed an onset for empowering purpose towards environmental interest as eco-influencers who will encourage stewardship as conduits for sustainable practices.

Keywords: *Reusable Face masks, TikTok, #Eco-influencers, Sustainability*

INTRODUCTION

To wear or not to wear face masks is not anymore, a statement nor a dichotomy to refute but a question on how we use them sustainably because, as the globe still grapples with the post-pandemic, wide-scale use of face masks has dramatically become the should-be wear basis of people and their first health gear against the virus and evolving strains. And throughout the pandemic, it is health customary to use face masks; as an evident report, Filipinos use masks and they prefer to use disposable face masks or single use masks as safeguard to virus threat (Limon, et al., 2022). But, the prelude of disposable masks would be seen all over the place, including on the ground, beaches, and parks. This means that if humans accidentally encounter them, they pose an additional risk of contamination to them (Lee, 2020; Spennemann, D.H.R., 2021; Ramkissoon H, 2020). This led to a huge threat unfolding with repercussions – threatening our environment because of the accumulating plastic waste.

It has been noted that the use of DFMs (Disposable face masks) as a prophylactic treatment against COVID-19 outbreaks has inevitably resulted in more hike production to meet the wider public for human consumption (Crismundo, 2020). This can assume that from then twenty million homes per country

require the consumption of at least two masks daily, the production of DFMs grows at a steady rate and climbs to billions per month worldwide reaching an extensive exponential rate.

Conversely, reusable facemasks have the capability to minimize the amount of trash generated and findings demonstrates that reusable masks can perform most of the functions of single-use masks while reducing the amount of trash accumulated (Lee, et al., 2020; Spennemann, D.H.R., 2021; Ramkissoon H, 2020); however, due to the changes in the materials used in their development and the addition of disinfectant for reusable facemasks, there may be a trade-off in terms of environmental implications (Spennemann, D.H.R., 2021). Additionally, certain reusable masks can be supplemented with single-use filter to provide higher air filtration; this may reduce trash generated by single-use masks, but it is also possible that a large amount of waste will be generated for disposal as well.

Redefining Environmental Engagement
In the age of social media where alternative platforms pave the road onto relaying news mainstream and promoting brand awareness, this comes the opportunity to voice out environmental activism for stewardship; and a social platform emerging in popularity hub is TikTok, since it has set to be a convenient social avenue in providing discourse related to sustainability issues and raising environmental concerns (Hautea, et al., 2021; Basch, C, 2022). Reasons can be pointed to the result of the viewer's broad reach; its popularity in discussing various topics does not last for hours. Furthermore, as opposed to other social media sites, another significant advantage of TikTok is that videos uploaded to the platform may be good for popular opinion seen online on any search engine or digital system that has an internet connection (Basch, 2022). As a result, users can easily access TikTok clips, brands, or videos that have been allocated with the same keywords or that have been set to specific audio or music recordings. If requested, clips can be posted to any electronic device connected to the internet, rather than only a smartphone, and can be viewed on any generated web pages. Aside from the availability and relative accessibility, TikTok is opined to produce, with guided practice, sound amplified advocacies and affect-laden information to a wide spectrum of audiences.

Subsequent to the mentioned premises this study focuses on application of TikTok committed for giving voices as eco-influencers through producing inspiring, accessible and engaging content more so, imparting environmental awareness and encouraging sustainable practice particularly the utilization of reusable face masks over disposable in alleviating environmental unrest of plastic waste.

This study primarily is anchored to the following social theories:Behavioral change model (1990), where Hungerford opined on the connection between individual behavior processes and cultural influence in emulating positive change and highlighting how to effectively interact with the environment responsibly. It presupposes that an individual's attitude and behavior can be influenced directly by locus control, rather than focusing on perceiving impacts on his surroundings. Moreover, this theory instead considers how various elements such as social media, ideal practice, economic, and technology shape a person's behavior to act.

The Environmental Citizenship Concept (1999) tackles the importance of biodiversity and its components. The prime agent in this model deals with humans, who are the agents of positive change. According to Hawthorne and Alabaster, the theory delineates the importance of personal relationships and involvement in the preservation and conservation of environment. The main tenet for this to materialize is 'initiative 'from the global unrest. Likewise, this determines citizens to become more sensitive to the environment and thus more able to act in the best interest of the ecosystem. For instance, this principle perhaps is applied to the purchasing of goods and services in a way that citizens' primary concern will be environmental sustainability over utility.

Another subject to social-environmental discourse is the human ecology en masse in the role of competing network within its scope (Park, 1936). For ecologists looking at modern ideas about economic growth and technology from an anthropological point of view, while cultural beliefs are looked at in the modern sciences like media. When human ecology pales in comparison these ideas to other scientific findings about biodiversity loss, climate change, and global inequality, it challenges the ideas that keep us from having a sustainable and integrated society.

The mentioned concepts offer sound account for environmental awareness to materialize in social context and environmental organizations. They may catapult the existing values to uncover beliefs and

personal choices. In addition, the interest and voluntarism are the prime gauge in supporting causal series of environment stewardship whether in-person or in digital social activism.

Figure 1. Paradigm of the study
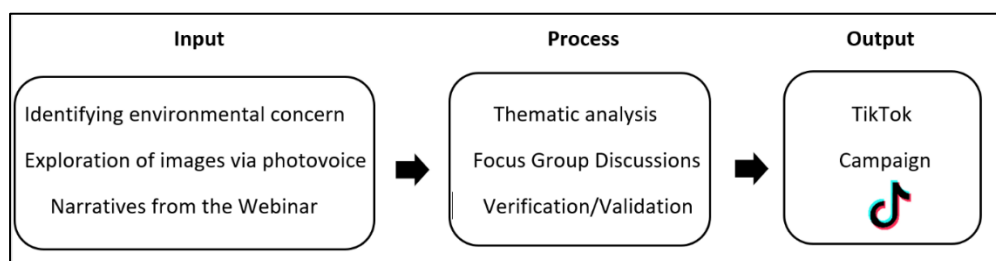
The IPO model has chosen to fit to the interest of the study from climate-awareness to climate-engaged influencers. The inputs here are the identified concerns based on the webinar of teach-in, exploration of environmental issues within the context of the participants likewise the process phase describes the data analysis to come up a suitable TikTok campaign.

Figure 2. Webinar thumbnail

The webinar cited in the model was the climate justice teach-in-webinar that were viewed by the participants on the link: https://youtu.be/1UeIz91DjjY. In a nutshell, the meat of the talk circulated on the matter of environmental changes and actions using social media, describing the scope of the climate catastrophe and risk.

As such, it is thought that this represents a model consisting of soft power that might contribute to the debate and perhaps alter the established processes of community affairs. The goals webinar intertwined to the purpose of this study yielding threefold: (1) to define the forms and characteristics of social media as a soft power method; (2) to analyze its influence on the awareness of societies; and (3) to assess whether increased public awareness could influence the policy processes of governments. Also, it concentrated on evaluating the connections between a few prominent sustainability change-related events and the patterns in people's searches on the Internet in relation to mobilizing actions for sustainability practices which also tackled the alternative disposable face masks.

Research Questions

This study focused on collaborative thinking of interested people who were called #Eco-influencers for developing practical TikTok social campaign encouraging audience to patronize reusable facemask over disposable ones. Specifically, this study endeavors to attend the following:

1. What are the views of the participants on the impact of disposable face masks as identified from the thematic analysis of photovoice and FGD?
2. How a group of eco-influencers will frame a TikTok campaign encouraging reusable facemask?

RESEARCH METHODOLOGY

Research Design

This study employed qualitative approach to the informants who were conveniently chosen to produce campaign material focusing on portraying the impact of disposable face masks. Initially, there are ten participants who were invited to a webinar titled: #MakeClimateAConversation. The aim was to provoke dialogue from teach-in then the study undertook two-method research phase: photovoice as initial approach in forming holistic background of the pressing issues of surroundings and followed by focus group discussion in catching rich information. Before the conduct, interview procedure matrix was utilized to acquire insights from the participants' experiences in this case. Using Castillo-Montoya's (2016) interview refinement protocol framework, the researcher was able to guarantee that all the interview questions are at pace, fit with the research topics, and adhered to inquiry-based dialogue before sending consent to the informants.

Photovoice phase

In the initial stage of the study, the photovoice is used to capture distinct and reflective photos of the case of disposable facemasks within the informants' vicinity. Photovoice is considered a participatory inquiry relevant in conjunction with a campaign and evidence-based construct which can contribute to formulating adequate initiatives for social problems that are relevant to the community (Nykiforuk, et al., 2011; Wang & Burris, 1997). Before commencing the gathering, the process took a 2-hour online briefing to interested students on the process of taking images since taking pictures is perceived as intrusive, wherein carefully conducted with caution. The informants were oriented according to the scope of taking a variety of pictures without permission and the set ethical rules. In addition, the briefing included the merit of decision-makers, organizing, and evaluating the streams of information collected, display the images in a way that appropriately represents the participants' most pressing concerns. The timeframe given for documentation was three days and another day to reflect on their narratives, respectively.

Focus Group Discussion (FGD) phase

To further explore evidence from the desk study in photovoice, focus group discussion was employed due to reasonable reasons tackling the environmental problems of disposable facemasks. since this is a recognized stimulation of dialogue centering on insider's perspective (Creswell & Poth, 2018). Consequently, the research process then had phase strips to ten students with homogenous characteristics but were strangers from one another coming from different specializations from the faculty of college of education at Tayabas Western Academy, Quezon province. During the session interacting with others in a focus group were observed, participants often adjusted their viewpoints or even reverse their stances openly. The researcher himself was the moderator in regulating group dynamics. Nuanced voices, personal experiences and verbal discussion were warranted to look through for patterns, details, and meanings. The FGD held on the last week of April 2022 and took two hours via Zoom platform.

Data Analysis
Figure 2. *Data Analysis Flowchart of the Study*
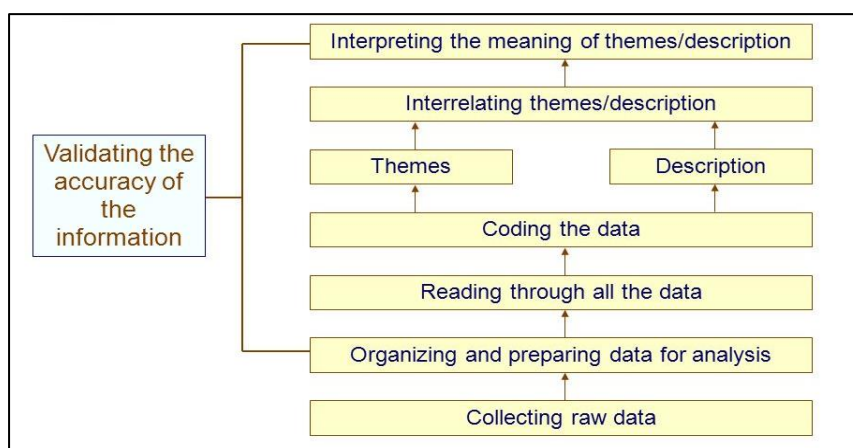
The collected data from the virtual meetings, then processed inductively for transcription, iteration, and analysis. The data analysis procedure initially pegged the demographic data of the participants based on social interest. Afterward, the analysis used inductive thematic analysis, specifically thematic analysis, anchored on the framework and methods of constructivism, interpretivism. Microsoft excel was chosen to create thematic matrix. The generated findings had been examined using direct quotations and color coding. Moreover, the themes arisen were forwarded immediately to the informants to verify the meanings.

Ethical considerations
Before commencing the data gathering and FGD, the proposal was submitted to the institutional ethical committee for approval. Afterward, the participants conducted in a prearranged manner considering their availability and convenience were that they have the choice to withdraw at any point of the stage. Pseudonyms were to be used to maintain the anonymity of all participants; before and during the process, participants were oriented and given copy of consent form.

RESEARCH FINDINGS AND DISCUSSION

Subsequent to the teach-in webinar, this section succinctly presents the highlights of the findings upon analysis of the gathered data.

Figure 3. *Discard pattern of disposable facemasks found within the town of Candelaria, Quezon Province (Photos were captured by the photovoice participants). P1, P2, Pn…(from top left)*

From the photovoice or novella, the participants took snapshots reflecting their views and sentiments on the environment and the use of disposable masks. This phase provided insights by allowing participants to explore their surroundings and taking account of the of any pressing environmental pollutants. The nine images presented above are the showcased photos portraying concerns on discarded disposable facemasks. The findings are discussed and presented in tabular forms.

Table 1. *Summary of FGD composition*

*Image code from collated figures	Corresponding quotes
P1	"The residents of this place can be defined on the way they treat their surroundings. The people are the main culprit of this environmental hot potato. Pity on them. Pity on us"
P2	"Itong litrato ay sumasalamin sa mababang pananaw sa ukol sa pandaigdigang isyu(…) nababatid nito ang kawalan ng disiplina" [This picture reflects a low view of global issues (…) it is aware of the lack of discipline].
P3	"Apathy is real and happening. People are not even aware how to dispose creating a wider problem."
P4	"Unaware to big [sic] crisis they are considered pollutant enabler(s) without any social labelling."
P5	"Ako (student) ay tumataliwas sa masamang idudulot nito sa kalikasan. Nagsisimula sa maliit na aksiyon ang tulong natin sa kalikasan." [I (student) oppose the harm it will cause to nature. Our help to nature starts with small actions].
P6	"The person literally did not properly dispose this… our people constantly use disposable facemasks which becomes a custom to us… in the end, no matter how we properly disposed the material, it (facemask) it will keep coming back, haunting us in disbelief."
P7	"Marami sa atin ay walang pakialam kahit na may pinagaralan.. wala silbi ang pag-aaral kung wala naman pakialam sa nangyayari sa kabuoan." [Many of us don't care even if we are educated... there is no point in studying if we don't care about what is happening in the whole].
P8	"Ma-porma ang naka disposable facemask pero hindi alam na ito ay dagdag sa plastic waste. *Double-edged sword* ang nagaganap, alam nating proteksiyon ang facemask sa *virus* pero ang unforeseen impact nito ay malala." [Disposable facemasks can be aesthetic, but it is not known that this is an addition to plastic waste. A double-edged sword is happening, we know the facemask is protective against the virus, but its unforeseen impact is severe].
P9	"No concern to all living things (…) they do not have awareness to the long term impact and environmental risk this [facemask] may bring."

*The image code (Pn[th]) represents one participant of this study.

The findings tell us different perspectives and concerns of the informants to the environment. Initially the line of inquiry and sharing started using the technique of "I see, I think, and I wonder" to encourage discussion, from the point of view of the first-year students, they voice out and rallied not to of face

masks per se and its improper uses, but to the disposal of facemasks, especially disposable or single-use masks. From the verifiable procedures and responses of the college students, four of them denounce how face masks can affect the solid waste management, while three explicitly take the reasons behind the overt behavior.

The second line of inquiry discusses how they seem view the environmental toll and the implications brough by face masks as they provide meanings to all captured shots. Two informants mentioned the importance of face masks as the first line of defense but agreed on the more on the importance of sustainable practices. Five of the participants described the query as offset to the business interest and from that any meaning must be taken with sensitivity especially when dealing decisive decisions in resolving issues.

For the wrap-up phase one describes the provision of social media as main tool to campaign and provide awareness but followed an expression of caution. The discussion went to come two informants exclaiming their feelings to provide potent, if not radical, social awareness.

In general, the participants underscore of instilling the use of face masks as the country onlooks to progressive post pandemic without barring of sustainable practices.

Note. The proposal of solutions, campaigns, or conflict resolutions had not come from the focus group discussion phase directly, it served only as avenues for open-ended dialogue.

Table 2. *Summary table of themes*

Themes	Highlights from the descriptive coding
Unsustainable practices	The use disposable facemask contaminates future resources (P1) Buying and depending on disposable facemasks (…) not finding long-term alternatives (P2, P8) Overuse of materials is common now(P5) People use disposable facemask as on-easy-ready-wear (P7)
Lack of environmental concern	People has no care at all(…) not educated (P1) [W]e're supposed to think concern sa environment… but they just throw away without thinking…but to no avail (P2) They [troublemakers] do not perceive the long-term impact (P9) Alarming (…) hard to control and must adapt to change (P6, P9)
Disturbing	Very upset to think and see the trash (P4) Simple task [sic] is not followed making us annoyed (P7) It is disgusting (...) waste will go to waste (P8) I think even educated people are not aware to simple trash bin (P9)

There three emerging themes after transcribing and explicated the data accordingly. The first identified pattern is the 'unsustainable practices' in this study it characterizes for depending on and contaminating plastic waste without being aware of the long-term impact. The categorization identified five informants in agreement to the theme. The lenses of the participants pointed the patronizing and conforming the status quo of defending health against the virus is tantamount to their daily actions at the expense of the environment.

From the given exhaustive description, the second theme is "lack of environmental concern" or the "I do not care" attitude - the narratives exemplify the apathy towards their surroundings. The informants centralized their claims to the end-means of the actions – wearing face masks and their choices regardless of what will be the impending repercussions.

Study participants unfolded their strong emotions against the disturbing behavior of man were resulted to the plastic waste. They are upset for contributing to the visual pollution, in addition that it is alarming to the welfare of everyone. Three participants expressed their anger foreseeing for the piling of rubbish landfills in the end. They focused on the decried human behavior regardless of the achieved status. Furthermore, the results are intertwined to how humans interact with their environment which turns to explain the meanings of their interactions. This is along with Spennemann (2021) conception wherein the alteration of the landscape can be observed on the manner of simple human dealings with the existing laws, and it is being managed and practiced.

In general, the salient themes tackle the simple unconsidered environmental issues of man – the use of disposable masks. Different point of views was centered to the modification of attitude and provide social awareness in using disposable face masks. Despite the strong stances against face mask all participants agreed that facemasks will be in common place even the ebbing of the pandemic, but their wavelengths are firm to reinforce simple change mitigating the impact of plastic waste and that is to take advantage of imparting information via TikTok.

What now? Eco-influencers: framing TikTok campaign

From the findings, the researcher created a public face group encouraging to form eco-influencers promoting the use of reusable facemask from the Tayabas Western Academy, Quezon Province. The eco-influencers here in this study focuses on movement from climate-dialogue to climate-engaged citizens. The thrusts are to provide alternative means and thinking about disposable face masks. The eco-influencers in this study are those willfully accepted the invitations without any string attachments.

**Table 3.** Demographic profile of volunteered eco-influencers and the duration of campaign materials.

Eco-influencer	Age	Sex	Course	Year level	Duration(TikTok campaign)
1	25	F	Education – Social Studies	I	53 seconds
2	20	F	Business Management	II	48 seconds
3	21	F	Education – English	II	40 seconds
4	26	F	Education - Elementary	III	15 seconds
5	19	M	Education – Soc Studies	II	1 minute and 06 seconds
6	19	F	Education – Soc Studies	I	48 seconds
7	28	M	Education – Soc Studies	I	1 minute and 09 seconds
8	28	M	Education – Soc Studies	I	31 seconds
9	24	F	Education – Soc Studies	I	59 seconds
10	20	F	Education – Values Ed	II	50 seconds
11	21	F	Education – Social Studies	I	59 seconds
12	20	F	Education – Science	II	57 seconds
13	18	F	Education – Soc Studies	I	31 seconds
14	18	M	Education – Soc Studies	I	46 seconds
15	19	M	Education – Soc Studies	I	59 seconds
16	18	F	Education – Soc Studies	I	49 seconds
17	18	F	Education – Soc Studies	I	39 seconds
18	18	F	Education – Soc Studies	I	35 seconds
19	25	M	Education – Soc Studies	I	49 seconds
20	19	F	Education – Filipino	I	40 seconds
21	22	F	Business management	II	32 seconds

Note. 2nd semester, SY 2021-2022

Establishing environmental conduits of TikTok, the eco-influencers are aware on basic interface of the application, so they were given instructions on how to create TikTok adhering to the guidelines such as prohibiting insertion of any harmful content and vulgarly messages. The length of the video is the first factor to consider. TikTok recently increased the limit to 60 or more seconds by stringing together four 15-second chunks. This, however, only applies to films shot directly on the application.

Out of 21 eco-influencers, 15 are female and 6 are male. The content of TikTok, upon getting consent, were uploaded to be readily available on YouTube and Facebook pages. Key features such as "Duet" or "Stitch" and "React," offers eco-influencers to post their ingenuity and allows them to interact with other users on the platform (see QR code and link below). TikTok extends also facilitates social users to interact and creator with the "Live Video" function, which allows participants to discuss concerns while receiving comments from other users.
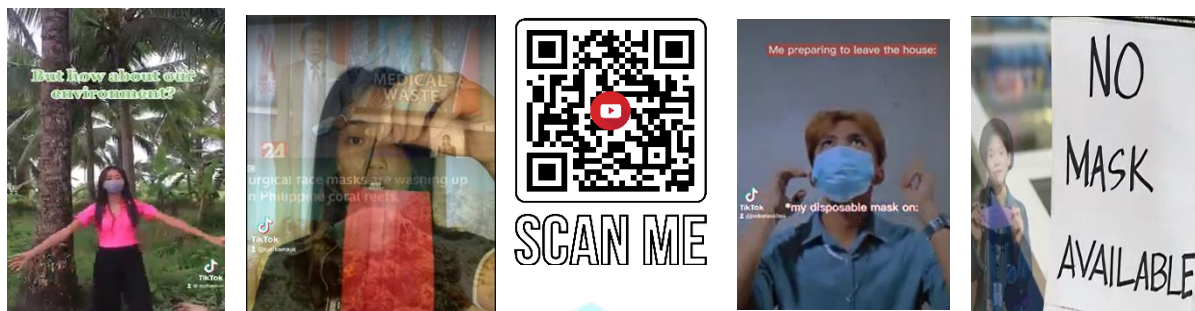
CONCLUSION

From the identified collective meanings, the study reflects on how people view and interact with the environment. The firsthand narratives provided are themes such as "unsustainable practices," "lack of environmental awareness," and "disturbing images," which came to initiate collaborative thinking, reinforcing the use of reusable face masks in lieu of disposable ones. Forming groups of stewardship as eco-influencers who are voluntary with social reconstructive interests is not an easy feat because the highlights centralized the importance of human behavior as an agent of change and how social media can potentially catapult environmental acumen into stimulating a climate-engaged attitude. Furthermore, despite the strong stances espousing TikTok as the primary conduit of change, it is not the end-all and be-all panacea, but only serves as a modest step to voice environmental concerns and demonstrate sustainable practices, to say the least.

Based on the findings, the following recommendations are made: students should actively engage on social media and purposefully maintain the rapport that bridges initiative for promoting sustainability viability by focusing attention on online audiences. It's also been said that students are more likely to help collect data if they think their contributions are valued. This is especially true when the data being collected is about their economic well-being and is being collected through the media. However, concerning the public, educators and policymakers may collectively integrate climate justice by providing continuous acumen dialogue and benchmarking for environmental awareness and mobilization.

REFERENCES

Basch, C. H., Yalamanchili, B., & Fera, J. (2022). #Climate Change on TikTok: A Content Analysis of Videos. *Journal of Community Health*, *47*(1), 163–167. https://doi.org/10.1007/s10900-021-01031-x

Castillo-Montoya, M. (2016). Preparing for Interview Research: The Interview Protocol Refinement Framework. *The Qualitative Report*, *21*(5), 811-831. https://doi.org/10.46743/2160-3715/2016.2337

Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and the research design: Choosing among five approaches (4th ed.). Thousand Oaks, CA: SAGE. https://doi.org/10.1002/nha3.20258

Crismundo, K., 2020. DTI chief urges mask production as demand climbs to 1.2B https://www.pna.gov.ph/articles/1100201#:~:text=MANILA%20%E2%80%93%20Trade%20Secretary%20Ramon%20Lopez,(Covid%2D19)%20pandemic.&text=Amid%20the%20Covid%2D19%20outbreak,face%20masks%20when%20 going%20out

Gibbs, A. (1997). Focus groups. Social research update, 19(8), 1-8. http://sru.soc.surrey.ac.uk/SRU19.html

Hautea, S., Parks, P., Takahashi, B., & Zeng, J. (2021). Showing They Care (Or don't): Affective Publics and Ambivalent Climate Activism on TikTok. *Social Media and Society*, *7*(2). https://doi.org/10.1177/20563051211012344

Hawthorne, M. & Alabaster, T. (1999). Citizen 2000: Development of a model of environmental citizenship. Global Environmental Change 9: 25-43. DOI: https://10.1016/S0959-3780(98)00022-3

Hungerford HR, Volk TL. (1990). Changing learner behavior through environmental education. The journal of environmental education 21: 8-21. https://doi.org/10.1080/00958964.1990.10753743

Lee, K.-P., Yip, J., Kan, C.-W., Chiou, J.-C., & Yung, K.-F. (2020). Reusable Face Masks as Alternative for Disposable Medical Masks: Factors that Affect their Wear-Comfort. International Journal of Environmental Research and Public Health 17, 6623. https://doi:10.3390/ijerph17186623

Morgan, D. L. (1997). Focus groups as qualitative research (2nd ed.). Sage Publications, Inc. https://doi.org/10.4135/9781412984287

Nykiforuk, C. I., Vallianatos, H., & Nieuwendyk, L. M. (2011). Photovoice as a Method for Revealing Community Perceptions of the Built and Social Environment. International journal of qualitative methods, 10(2), 103–124. https://doi.org/10.1177/160940691101000201

Park, R. E. (1936). Human Ecology. *American Journal of Sociology*. **42** (1): 1–15. https://doi:10.1086/217327.JSTOR2768859.S2CID222450324

Puna, T. (2023). Environmental Conservation Practices in Baybay City Leyte. International Journal of Multidisciplinary Educational Research and Innovation. 1(1), 47-58. https://doi.org/10.5281/zenodo.7379570.

Spennemann, D.H.R. (2021). COVID Face Masks: Policy Shift Results in Increased Littering. Sustainability, 13, 9875. https://doi.org/10.3390/su13179875

Ramkissoon H (2020) COVID-19 Place Confinement, Pro-Social, Pro-environmental Behaviors, and Residents' Wellbeing: A New Conceptual Framework. *Front. Psychol.* 11:2248. https://doi:10.3389/fpsyg.2020.02248

Wang, C., & Burris, M. A. (1997). Photovoice: concept, methodology, and use for participatory needs assessment. *Health education & behavior : the official publication of the Society for Public Health Education*, *24*(3), 369–387. https://doi.org/10.1177/109019819702400309

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